Neopest (*Neopestalotiopsis)*

Neopestalotiopsis sp. (Neopest) is a devastating strawberry disease that was first reported in Florida in the 2017 growing season. Since then, the disease has been detected in several other locations across North America. The disease was first encountered in Nova Scotia in 2021 with significant damage observed in the Maritimes beginning in 2024.

This pathogen prefers humid, wet and warm conditions with an ideal growing temperature of 25^{O}C, however it is capable of infecting plant tissue at temperatures ranging from 15-30^{O}C. The spores are spread mainly by water splashing from overhead irrigation, rainfall, and people moving through wet plants and spreading the spores from their clothing.

This disease affects all parts of the strawberry plant – fruit, petioles, leaves, crowns and roots, as illustrated in Figures 1 and 2 below.

Symptoms on **leaves** (Figure 1) appear as light to dark brown spots of varying sizes that are unevenly distributed across the leaf surface. They will contain a lighter brown centre with a slightly darker border that eventually expands and becomes irregular in shape. As the disease progresses, many small black structures may develop throughout the blighted tissue. These leaf spots may merge, creating a blight-like necrosis that eventually kills the entire leaf.

Fig 1: Neopest symptoms in the middle vs other leaf diseases, note the tan colour lesions and the small black pimple-like fruiting structures on the leaves.

The symptoms on strawberry **fruit** (Figure 2) are 2-4 mm diameter lesions that appear light tan in colour, are sunken, dry, and irregular in shape during early development. These lesions grow and are eventually covered by tiny black structures (acervuli) that ooze shiny black liquid that contain a large number of spores. In the early stages of development, it may be difficult to distinguish the symptoms of anthracnose fruit rot (*Colletotrichum*) and neopest, prior to the formation of the black fruiting bodies. Under very humid, wet conditions, you may also be able to see very dense, white mycelium on the lesion. Finally, in the later stages of development, the entire fruit may dry up and appear mummified. Caution: the crown and root symptoms are very similar to those produced by anthracnose and *Phytophthora* crown rot.

Fig. 2: Disease symptoms on fruit and initial leaf lesions